GREAT RIVER
ENERGY®

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June 22, 2005

The Honorable Kathleen D. Sheehy
Administrative Law Judge
Office of Administrative Hearings, Suite 1700
100 Washington Square
Minneapolis, MN 55401-2138

Dear Judge Sheehy:

Re: Revisions to Great River Energy's Certificate of Need Application,
Docket No. ET2/CN-05-347

On February 28, 2005 Great River Energy (GRE) filed its *Certificate of Need Application for Great River Energy's Cambridge Station* (Petition), Docket No. ET2/CN-05-347. On June 6, 2005, GRE submitted several revised sheets. Since the revision was submitted and at the request of the Department of Commerce, GRE updated Tables 3-3, 4-4, and 4-5 to reflect the final version of the fuel price forecasts contained in the EIA's *2005 Annual Energy Outlook.* GRE originally used the early release version of this data, since the final version was not available at the time GRE filed its application.

Great River Energy submits the following revised sheets to its Petition, consistent with Minnesota Rules, part 7849.0200, subp. 3. GRE includes one set of sheets with the changed cells in the tables highlighted and another set that are clean copies of the changed pages. Also attached is an Affidavit of Service.

Once again the revisions have no effect on the proposed size, type, or timing of the proposed Cambridge Station nor do they change GRE's conclusion that the facility is necessary to meet forecasted load for the summer season of 2007.

Questions may be directed to me or to Michele Beck Jensen at 763-241-2398.

Sincerely,

GREAT RIVER ENERGY

Rick Lancaster

Richard R. Lancaster
Vice President, Corporate Services

Enclosures

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AFFIDAVIT OF SERVICE

STATE OF MINNESOTA)
) ss
COUNTY OF HENNEPIN)

In Re: Comments of the Minnesota Department of Commerce

Docket No. ET2/CN-05-347

Lynn Safar, being first duly sworn on oath, deposes and states that on the 22nd day of June, 2005, copies of the revised pages for the certificate of need application in the above referenced matter were hand delivered or mailed by United States first class mail, postage prepaid thereon, to the following:

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Dave Jacobson
Minnesota Public Utilities Commission
121 Seventh Place East, Suite 350
St. Paul, MN 55101

ET2/CN-05-347

In the Matter of Certificate of Need
Application for GRE's Cambridge Station

1 Service List

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Lynn Safar

SWORN TO BEFORE ME this
22nd day of June, 2005

NOTARY PUBLIC

WENDY L. CASE
Notary Public
Minnesota
My Commission Expires January 31, 2010

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REVISED by GRE, 6/22/05

Table 3-3 - Project Cost Analysis

Item	Units	Project Data	Assumptions	MN Rule
Project Description				
Base Capability (Summer, site-specific rating)	MW	170	Manufacturer *pro forma* estimate	7849.025, A(1)
Cost Basis	Cal Yr	2004		
Life of Project	Years	30	Typical accounting life	7849.025, C(2)
Operating Cycle		Simple		7849.025, A(2)
Annual Capacity Factor	%	9.6%	PVS experience	7849.025, A(2)
Annual Operating Time	Hours	840	Formula	
Average Annual Availability	%	97.5	PVS ops experience	7849.025, C(3)
Fuel Type		Nat Gas		7849.025, A(3)
Heat Input (HHV)	MMBtu/hr	1,756	Manufacturer *pro forma* estimate	
Heat Rate (HHV) - Summer Rating	Btu/kWh	10,330	Manufacturer *pro forma* estimate	7849.025, A(4)
Efficiency (HHV) - Summer Rating	%	33.0	Formula	7849.025, C(8)
Project Capital Cost	$/kW	406	Overnight cost w/o IDC	
Fixed O&M Costs	$/kW-yr	3.46	PVS experience	
Fuel Costs	$/MMBtu	5.75	EIA *2005 AEO* plus transport & balancing	7849.025, C(4)
Non-Fuel Variable O&M Costs	$/MWh	8.41	Includes fired-hour costs & start charge	7849.025, C(5)
Capacity Costs (Fixed)				**7849.025, C(1)**
Total Project Capital Cost	$	69,020,000	Formula	
Annual Fixed O&M	$	588,200	Formula	
Total Annual Fixed Costs	$	6,523,920	8.6% annual FCs + Fixed O&M	
Project Capacity Cost	$/kW-yr	38.38	Formula	
Project Capacity Cost	$/kWh	0.046	Formula	
Production Costs (Variable)				
Net Annual Generation	MWh	142,800	Formula	
Annual Fuel Consumption	MMBtu	1,475,124	Formula	
Annual Fuel Cost	$	8,480,428	Formula	
Annual Non-Fuel Variable O&M Cost	$	1,200,948	Formula	
Total Project Variable Generation Cost	$	9,681,376	Formula	
Project Fuel Cost	$/kWh	0.059	Formula	7849.025, C(4)
Project Total Energy Cost	$/kWh	0.068	Formula	
Total Cost	**$/kWh**	**0.113**	**Formula**	**7849.025, C(6)**

3.23 Use of Space

The project will be located on land that is currently used for utility operations. Adjacent property is used for agricultural and transportation purposes.

The project boundaries will utilize the parcel south of 349th Avenue NE for the CT, substation, water tanks and other balance of plant equipment. The parcel north of 349th Avenue NE will be utilized for shop space and parts storage.

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4.5 Economic Comparisons to Proposed project

Table 4-4 provides the cost comparison between the project and the alternatives, which have met the initial screening criteria (oil-fired combustion turbine and the ethanol-fired combustion turbine). This table shows that the proposed project is clearly the lowest-cost alternative.

Table 4-4 - Comparison of Peaking Alternatives – Cost of Electricity

Item	Units	Project	Oil-Fired Simple-Cycle	Ethanol-Fired Simple-Cycle	Assumptions	MN Rule
Project Description						
Base Capability (Summer, site-specific rating)	MW	170	164	164	Manufacturer *pro forma* estimate	7849.025, A(1)
Cost Basis	Cal Yr	2004	2004	2004		
Life of Project	Years	30	30	30	Typical accounting life	7849.025, C(2)
Operating Cycle		Simple	Simple	Simple		7849.025, A(2)
Annual Capacity Factor	%	9.6%	9.6%	9.6%	PVS experience	7849.025, A(2)
Annual Operating Time	Hours	840	840	840	Formula	
Average Annual Availability	%	97.5	97.5	97.5	PVS ops experience	7849.025, C(3)
Fuel Type		Nat Gas	No. 2 Fuel Oil	Ethanol		7849.025, A(3)
Heat Input (HHV)	MMBtu/hr	1,756	1,714	1,714	PVS ops experience	
Heat Rate (HHV) - Summer Rating	Btu/kWh	10,330	10,450	10,450	PVS ops experience	7849.025, A(4)
Efficiency (HHV) - Summer Rating	%	33.0	32.7	32.7	Formula	7849.025, C(8)
Project Capital Cost	$/kW	406	430	443	Overnight cost w/o IDC	
Fixed O&M Costs	$/kW-yr	3.46	3.46	3.46	PVS experience	
Fuel Costs	$/MMBtu	5.75	6.53	19.45	EIA *2005 AEO* plus transport & balancing	7849.025, C(4)
Non-Fuel Variable O&M Costs	$/MWh	8.41	12.62	12.62	Includes fired-hour costs & start charge	7849.025, C(5)
Capacity Costs (Fixed)						**7849.025, C(1)**
Total Project Capital Cost	$	69,020,000	70,520,000	72,652,000	Formula	
Annual Fixed O&M	$	588,200	567,440	567,440	Formula	
Total Annual Fixed Costs	$	6,523,920	6,632,160	6,815,512	8.6% annual FCs + Fixed O&M	
Project Capacity Cost	$/kW-yr	38.38	40.44	41.56	Formula	
Project Capacity Cost	$/kWh	0.046	0.048	0.049	Formula	
Production Costs (Variable)						
Net Annual Generation	MWh	142,800	137,760	137,760	Formula	
Annual Fuel Consumption	MMBtu	1,475,124	1,439,760	1,439,760	Formula	
Annual Fuel Cost	$	8,480,428	9,398,831	28,003,332	Formula	
Annual Non-Fuel Variable O&M Cost	$	1,200,948	1,738,531	1,738,531	Formula	
Total Project Variable Generation Cost	$	9,681,376	11,137,362	29,741,863	Formula	
Project Fuel Cost	$/kWh	0.059	0.068	0.203	Formula	7849.025, C(4)
Project Total Energy Cost	$/kWh	0.068	0.081	0.216	Formula	
Total Cost	**$/kWh**	**0.113**	**0.129**	**0.265**	**Formula**	**7849.025, C(6)**

As for the biomass alternative analyzed, the table shows that substantial reductions in the cost of ethanol would be needed in order for such an alternative to be competitive with the project. Therefore, an ethanol-fueled peaker is not a reasonable alternative

Table 4-5 below demonstrates the relative annual revenue requirement ($/MWh) for the three projects examined in depth in Table 4-3 and 4-4. This includes the proposed project as well as two alternatives.

Table 4-5 – Comparison of Peaking Alternatives - Rate Impact

[TRADE SECRET INFORMATION BEGINS

TRADE SECRET INFORMATION ENDS]

4.6 Conclusion

GRE has examined alternatives to the proposed project. Based on the primary objectives, there are no reasonable alternatives that are available in the necessary timeframe that would reliably and economically meet GRE's peaking resource needs.

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Table 3-3 - Project Cost Analysis

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Project Description				
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TRADE SECRET INFORMATION ENDS]

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